

Listing of Claims/Amendments to the Claims:

The listing of claims that follows will replace all prior versions in the application.

1. (currently amended) A method for detecting failure of an air consumer circuit in a compressed air system, comprising the steps of measuring a variable of state in a compressed air consumer circuit, comparing at least one of said variable of state and a negative gradient of said variable of state against a respective threshold value, and when at least one of said variable of state and said negative gradient of said variable of state satisfies a preselected circuit-failure criterion, shutting off said compressed air consumer circuit~~[[.]], and wherein said preselected circuit-failure criterion is satisfied when at least one of said variable of state and said negative gradient of said variable of state is below said respective threshold value for a time at least one of equal to and greater than a time of at least one of a dynamic change of said variable of state and a dynamic collapse of said variable of state.~~

2. (canceled).

3. (previously presented) The method according to claim 1, wherein said threshold value for said variable of state corresponds to a value of said variable of state to be adjusted in said compressed air consumer circuit.

4. (currently amended) A detection system for detecting failure of ~~[[a]]~~ compressed air consumer ~~circuits circuit~~ in a compressed air system ~~comprising including:~~

a compressed air supply part having a compressor~~z~~[[.]],

a consumer part having a plurality of compressed air consumer circuits~~z~~[[.]] and

electrically actuatable valves for supplying compressed air to said
compressed air consumer circuits; and [[,]]

the detection system comprising:
sensors for monitoring pressure in said compressed air consumer
circuits; and [[,]]

an electronic control unit for evaluating electrical signals from said
sensors and for controlling said electrically actuatable valves, said electrically actuatable valves
associated with said compressed air consumer circuits being open, said control unit ~~being~~
operative adapted to:

compare at least one of a variable of state in individual
ones of said compressed air consumer circuits and a negative gradient of said variable of state
against a respective threshold value; [[to]]

identify failed ones of said compressed air consumer
circuits; ~~and to~~

determine that at least one of said variable of state and
negative gradient thereof satisfy a preselected circuit-failure criterion when at least one of said
variable of state and said negative gradient is below said respective threshold value for a time at
least one of equal to and greater than a time of at least one of a dynamic change of said variable
of state and a dynamic collapse of said variable of state; and

switch ones of said electrically actuated valves associated
with said failed ones of said compressed air consumer circuits to a closed state to shut off said

failed ones of said compressed air consumer circuits ~~when at least one of said variable of state and negative gradient thereof satisfy a preselected circuit failure criterion.~~

5. (canceled).

6. (previously presented) The system according to claim 4, wherein said threshold value for said variable of state corresponds to a value of said variable of state to be adjusted in said failed ones of said compressed air consumer circuits.

7. (previously presented) The system according to claim 4, wherein said electrically actuatable valves are solenoid valves.

8. (previously presented) The method according to claim 1, wherein said variable of state is at least one of pressure, air flow rate, air mass and energy of said compressed air consumer circuit.

9. (previously presented) The system according to claim 4, wherein said variable of state is at least one of pressure, air flow rate, air mass and energy of said compressed air consumer circuits.